Washington State Department of Transportation

Field Dry Density Test

Contract Number _____ SR Number _____ Date _____

Section _____ Inspector _____

* Test Hole Number				
Section to Section				
* Test Station				
* Reference to Center Line				
* Reference to Subgrade				
* Material (Clay, Top Course, etc.)				
Depth of Material (If surfacing)				
Wet Density Determination				
Wet Density lbs/cu ft	0			
	90			
Average Wet Density lbs/cu ft	Average			
Moisture Determination				
Mass of Tare				
Mass Damp Soil + Tare				
Mass Dry Soil + Tare				
Mass of Moisture				
Mass Dry Soil				
* % Moisture (Field Dry) = Mass of Moisture (100) / Mass of Dry Soil				
Gradation Determination				
Mass of Sample				
Mass Retained on No. 4 Sieve + Tare				
Mass of Tare				
Mass of Material Retained on No. 4 Sieve Mass - Tare				
% Retained on No. 4 Sieve (% Oversize) = Mass Retained (100) / Mass of Sample				
% Passing No. 4 Sieve = (100 - % Retained)				
Dry Density Determination (Field Test)				
* Dry Density lbs/cu ft = Average Guage Reading / 1 + (% Moisture / 100)				
Specification Density Determination				
* Maximum Density from appropriate curve lbs/cu ft				
* Standard				
* Corrected Maximum Density for Nomograph lbs/cu ft (for non-granular material)				
* Density lbs/cu ft (% of maximum) = Dry Density X 100 / Maximum Density				
Optimum Moisture Determination				
* Optimum Moisture (from curve)				
* Opt. Moisture Corrected (non-granular mat. only) = Opt. Moisture X % Passing No. 4 /100				

Note: If retest, add letter to number such as 1st test No. 27, retest 27A

*** Information is to be transferred to DOT Form 351-015, "Daily Compaction Test Report"**